PSYCHOTIC DISORDERS In Late Life Douglas F. Steenblock, MD Relevant to the content of this educational activity, I do not have any relationships with commercial interest companies to disclose but I do intend to discuss off-label uses of commercial products/devices. In individuals, insanity is rare; but in groups, parties, nations, and epochs, it is the rule. Friedrich Nietzsche **Psychotic symptoms** Hallucinations Illusions Delusions Disorganized Speech/Behavior

Hallucinations Auditory Voices Music Other sounds Visual Poorly defined (e.g. shapes, distortions)Well formed (e.g. people, animals) Tactile Bugs, picking, phantom Olfactory/gustatory Illusions • Misperception of a real sensory stimulus. • Can occur with any sense, but usually visual. • Normal people may experience occasionally. **Delusion** A false belief: Based on an incorrect inference of external reality.

- Firmly held despite clear evidence to the contrary.
- Not accepted by other members of the person's culture.
- The person is unable to distinguish reality from fantasy (i.e., Impaired reality testing).

Thought disturbances associated with psychosis:

- Loose associations (abrupt shift to unrelated topic)
- Blocking (sudden halt mid-stream)
- Ideas of reference (it's all about me)
- Thought broadcasting/insertion
- **Neologism** (new nonsensical word
- Echoalia (repeats what others say)
- Clang (associates words that sound alike)

Behaviors associated with psychosis:

- Echopraxia (imitates movements)
- Catatonia (posturing, waxy flexibility)
- **Negativism** (resistive to position change)
- Stereotypical (repetitive speech or action)
- Mutism (won't speak)



REAL

Psychotic Disorders in Late Life (Other Than Schizophrenia) Dementia Delirium Psychosis due to medication Psychosis due to medical condition Delusional disorders Mood disorders Other Pearl #1 New-onset psychosis late in life is often related to a neurodegenerative disorder. **Psychosis Related to Dementia** (Neurocognitive Disorder) Psychotic symptoms experienced by many dementia patients: Approx 40% of Alzheimer's Up to 75% of Parkinson's Can occur many different types of dementia. Many studies lump psychosis in with other symptoms, making it difficult to ascertain efficacy of antipsychotics.

Antipsychotic use with dementia patients

- "Black box warning"
- Increased mortality rate (2.6% vs. 4.5%).
- Causes of death are variable, including cardiovascular disease, stroke, infection, and falls.
- Greatest risk is during first few months.
- No particular agent is safer, although second generation antipsychotics may be safer than first generation.

WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

DEMENTIA-RELATED PSYCHOSIS

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of seventeen [17] placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients. Over the course of a typical 10-week controlled trial, the rate of death in drug-treated patients was about 4.5%, compared to a rate of about 2.6% in the placebo group. Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. Observational studies suggest that, similar to atypical antipsychotic drugs, treatment with conventional antipsychotic drugs may increase mortality. The extent to which the findings of increased mortality in observational studies may be attributed to the antipsychotic drug as opposed to some characteristics) of the patients is not clear. [Established medication name] is not approved for the treatment of patients with dementia-related psychosis.



Parkinsonian Disorders

- Alpha synucleinopathy
- Lewy bodies
- Loss of dopaminergic neurons
- Motor symptoms include:
 - Resting tremor
 - Bradykinesia
 - Rigidity
 - Gait disturbance

Lewy Body Disease

- Some authors report that this may be 2nd most common type of dementia.
- Visual hallucinations may be initial presenting symptom.
- Cognitive decline similar to Alzheimer's (and some cases may be mixed).
- Mild/moderate extrapyramidal symptoms.
- Other features may include:
 - REM sleep behavior disorderAutonomic instability

 - Falls
 - Syncope.

Treating psychosis in **Lewy Body Disease**

- LBD patients are extremely sensitive to antipsychotics (deaths have been reported).
- Try acetylocholinesterase inhibitors first (donepezil, rivastigmine, galantamine).
- If antipsychotics are needed:
 - Quetiapine
 - Clozapine (low dose)

Parkinson's Disease Dementia vs. **Lewy Body Disease**

- "One year rule"
- If dementia occurs well after the onset of motor symptoms, then is likely PDD.
- If dementia occurs around the time that motor symptoms start, then more likely LBD.

Treating psychosis in patients with Parkinson's Disease

- Psychosis can occur in the absence of dopaminergic medication.
- If taking dopaminergic medication, first assess whether it can be reduced.
- $\label{thm:must} \mbox{Must weigh severity of psychotic symptoms, versus physical function.}$
- Coordinate closely with neurologist.
- If antipsychotics required, consider:
 - QuetiapineClozapine
- Keep doses low and monitor closely.



The second secon	
NOT	

Delirium

- AKA encephalopathy.
- Acute onset of cognitive impairment with fluctuation.
- Due to underlying medical condition (infection, metabolic, medication change, surgery, etc.).
- Patient can be hyperactive or hypoactive.

Delirium-related psychosis

- Hallucinations can occur:Often visual and tactile.
- Should try to avoid psychiatric medication.
- If psychosis extreme, can use haloperidol (or other antipsychotic).
- Recent meta-analysis cast doubt on efficacy of antipsychotics.
- Avoid benzodiazepines (unless alcohol or sedative withdrawal).

23

Medications that can cause psychosis:

- Dopaminergic medications for Parkinsonism (e.g. carbidopa/levodopa).
- Corticosteroids (e.g. prednisone).
- Antivirals (e.g. amantadine).
- Many others may cause psychosis secondary to delirium.

_		
-		
_		
-		
-		
_		
_		
_		
_		
_		
_		
-		
_		
_		
-		

Substance abuse

- Alcohol intoxication or withdrawal.
- Stimulant intoxication.
- Hallucinogenics (including cannabis).
- Don't rule out drug screen because of age.

Medical conditions that could cause psychotic symptoms:

- Endocrine (e.g. thyroid)
- Metabolic (e.g. porphyria)
- Autoimmune (e.g. lupus)
- Infections (e.g. malaria)
- Narcolepsy (hypnopompic/hypnogogic)
- Nutritional deficiencies (e.g. Vit B12)

Neurological disorders that could cause psychotic symptoms:

- Temporal lobe epilepsy
- Brain tumor
- Head injury
- Stroke
- Huntington's Disease
- Wilson's Disease
- Demyelinating Disorders (e.g. multiple sclerosis)

_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				
_				



Delusional Disorder

- Delusions of at least 1 month duration.
- If hallucinations present, they are not prominent and are related to delusion.
- Usually non-bizarre.
- Types:
 - Erotomanic (someone else loves them)

 - Jealous (partner unfaithful)Persecutory

 - Somatic (has illness/defect)Mixed or unspecified
- Treat with antipsychotic and psychotherapy.

Managing a delusional patient:

- Don't try to convince the patient that the delusion is false.
- Validate feelings, but don't pretend that delusion is
- Empathize that you understand how real it seems and how disturbing it must be.
- Be straightforward, honest, and open; patients are often suspicious and wary.
- Focus on common-sense coping strategies and support systems.
- Can stress more general benefits of medication (calm nerves, reduce anxiety, help sleep).

_				
_				
_				

Parasitosis

- Belief that skin or body is infested.
- Bimodal incidence (may increase with age).
- Usually has poor insight.
- May have self-inflicted skin lesions.
- Important to establish trust.
- Treat with antipsychotics, but educate.
- · Risperidone, olanzapine.

31

Capgras Syndrome

- Patient believes that familiar people are imposters.
- Some cases occur in schizophrenia-spectrum disorders, but others occur in neurological disorders (e.g. dementia).
- Data limited, but seems to respond fairly well to antipsychotics.

32

Delusional symptoms in partner of individual with Delusional Disorder

- Rare; also known as folie a' deux, or shared psychotic disorder
- A delusion (usually persecutory) develops in the context of a close relationship with a person who has an already-established delusion.
- Most cases involve dependent female family members; one submissive, one dominant.
- Can be suicidal or homicidal.
- Antipsychotics can help as can separation.



Brief Psychotic Disorder

- One or more of the following occurs for at least one day, but less than one month:
 - Delusions
 - Hallucinations
 - Disorganized speech
 - Grossly disorganized or catatonic behavior
- Usually follows stressful event.
- More common if premorbid personality disorder (especially borderline).
- Psychotherapy more important than medication.
- Usually resolves; good prognosis.

Bipolar Disorder

- Psychosis usually seen in the context of mania (mood congruent).
- Many antipsychotics effective treatment for mania.

...

-				

Major Depressive Disorder

- Symptoms are mood-congruent and sometimes "soft" or not readily apparent.
- Antipsychotic treatment critically important in order to achieve remission.

37

Quasi-psychotic syndromes

38

Bereavement

- The patient may have hallucinations related to the deceased (sense their presence).
- Reassure that this is normal during bereavement.

Charles Bonnet Syndrome

- Visual hallucinations related to certain ocular conditions that reduce vision.
- Not delusional; insight remains intact.
- Patients may be reluctant to disclose and many are not bothered.
- Response to antipsychotics is variable.

40

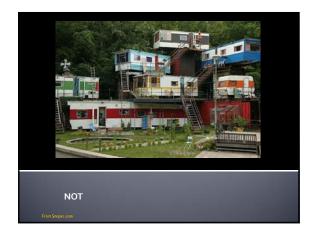
Post Traumatic Stress Disorder

- May have vivid flashbacks, nightmares, dissociation relating to past events.
- May hear voices (tormentors, victims).
- These are actually "re-experience phenomena" and not true psychosis.
- Response to antipsychotics is variable.
- Best approach is long-term psychotherapy.

41

Pearl #2

 Not every psychotic symptom needs to be medicated.



ANTIPSYCHOTICS

FIRST GEN (TYPICAL)

- Haloperidol (Haldol) Fluphenazine (Prolixin) Thiothixine (Navane) Perphenazine (Trilafon) Trifluperzaine (Stelazine) Thioridazine (Mellaril) Chlorpromazine (Thorazine) Others

SECOND GEN (ATYPICAL)

- Clozapine (Clozaril)
 Olanzapine (Zyprexa)
 Risperidone (Risperdal)
 Ouetiapine(Seroquel)
 Ziprasidone (Geodon)
 Apiprazole (Abilify)
 Paliperidone (Invega)
 Lurasidone (Latuda)
 Asenapine (Saphris)
 Iloperidone (Fanapt)
 Others

(Trade names in parentheses)

Clozapine

- May be used in cases of EPS sensitivity or nonresponse to treatment.
- Requires monitoring of WBC/ANC due to risk of agranulocytosis (q 1-4 weeks).
- Other possible liabilities:
 - Seizure risk
 - Metabolic
 - Cardiomyopathy
 - Anticholinergic

Extrapyramidal Side Effects (EPS) Parkinsonism: Resting tremor (pill rolling) Rigidity Bradykinesia (slow movement) Shuffling gait (falls) Treat with benztropine or amantadine. Other: Dystonia (torticollis, oculogyric) Drooling Akathisia (restlessness) Tardive dyskinesia (long term) More with 1st generation, less with 2nd generation agents. Neuroleptic Malignant Syndrome (NMS) Associated with initiation of or increase in antipsychotic (esp in young males). High doses or multiple antipsychotics have higher risk. $\frac{\textbf{Features:}}{\textbf{autonomic instability, fever, death.}}$ $\ensuremath{\mathbf{CPK}}\xspace \ensuremath{\mathbf{\underline{markedly}}}\xspace$ elevated; WBC and LFTs may be elevated as well. Tx: Stop antipsychotic, admit to medical, may need bromocriptine, dantrolene or amantadine. **Anticholinergic Side Effects** Increased confusion Dry mouth Blurred vision

ConstipationUrine retention

Glaucoma exacerbation

Metabolic Syndrome

- Mainly associated with second generation (atypical) agents.
- Weight gain, hyperlipidemia, hyperglycemia, diabetes.
- Lower Risk:
- Aripiprazole, Ziprasidone
- Medium Risk:
 - Risperidone, Quetiapine
- **Higher** Risk:
 - Olanzapine, Clozapine
- Risk for older agents unclear

49

Other Complications

- Antihistaminic:
 - Sedation
 - Weight gain
- Orthostatic hypotension (falls).
- Hyperprolactinemia.
- Cardiac conduction (QT prolongation).
- Seizures.



References: A Allow Town S, Nagh Y, Name AS, Name OF Personalized interactional and activation associated with demonstra. Gende Psychol Biomaphysical Yead, 2019 Spay, 100 Spay,